

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1-2, 5-6, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colbert of record for reasons of record in view of Luzzi et al. (Luzzi), U.S. Patent 6,544,463 or Yakobson, U.S. Patent 6,280,677.

The Colbert patent discloses the use of carbon nanotubes, not the presently claimed materials. The Luzzi patent is cited to show the use of functionally equivalent materials, such as those claimed to the carbon shown in Colbert (see col. 4, lines 15-21). The Yakobson patent also shows the functionally equivalent materials, such as those claimed to the carbon shown in Colbert (see claim 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of Colbert to use other functionally equivalent materials, because the Luzzi and Yakobson patents teach the functional equivalence between the materials.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita of record for reasons of record in view of Luzzi or Yakobson applied as above.

The Morita patent discloses the use of carbon nanotubes, not the presently claimed materials. The Luzzi patent is cited to show the use of functionally equivalent materials, such as those claimed to the carbon shown in Colbert (see col. 4, lines 15-21). The Yakobson patent also shows the functionally equivalent materials, such as those claimed to the carbon shown in Colbert (see claim 3).

Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of Morita to use other functionally equivalent materials, because the Luzzi and Yakobson patents teach the functional equivalence between the materials.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morita in view of Luzzi or Yakobson as applied to claims above, and further in view of Colbert of record for reasons of record.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arun S. Phasge/
Primary Examiner, Art Unit 1795

